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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/092,333

03/06/2002

Imed Gharsalli

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7590

01/25/2005

CATERPILLAR INC.
100 N.E. ADAMS STREET
PATENT DEPT.
PEORIA, IL 616296490

EXAMINER

NGUYEN, KIMNHUNG T

ART UNIT

PAPER NUMBER

2674

DATE MAILED: 01/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/092,333

Applicant(s)

GHARSALLI ET AL.

Examiner

Kimnhung Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Application has been examined. The claims 1-15 are pending. The examination results are as following.

Claim Rejections - 35 USC § 103

1. Claims 1, 4-8, 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cobo et al. (US 6,305,162 cited by Applicant) in view of Nagao (US 6,532,003).

Regarding claims 1, and 8, Cobo et al. discloses in figure 1, a method for controlling a parameter of at least one signal including the steps of: receiving a desired command signal from at least one control input (20); activating a desired command as function of the desired command signal; and controlling a parameter of a signal from the at least one other control input (22) in response to the potential condition; and delivering the desired command signal to at least one output (see col. 2, lines 14-20). However, Cobo et al. does not disclose a determining a potential condition for receiving an undesired command signal from at least one other control input. Nagao discloses in figure 1, an undesired command signal from at least one other control input (see the control part 8, detects false coordinate data, therefore false coordinate data will not be executed or irrelevant program (see column 3, lines 9-15). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the undesired command signal (irrelevant program) as taught by Nagao into the system of Cobo et al. because this will not be problem such as an offset of a key entry position or a position of the cursor and execution of an irrelevant program).

Regarding claims 4-7 and 12-14, Cobo et al. discloses wherein receiving a desired command signal includes the step of receiving command signal an automated program (see fig. 2, see joystick associate with memory, see col. 4, lines 57-59); command signal from a proportional output device; the signal includes the step of increasing an amount of deadband of the at least one other control input (see fig. 7-9, see col. 4, lines 10-11) Cobo et al. also discloses the plurality of control inputs (28, 30, see fig. 1), includes an automated program (see figure 2).

2. Claims 2-3 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cobo et al. (US 6,305,162) and Nagao (US patent 6,532,0030) and in view of Alexander et al. (US 2003/0107502).

Cobo et al. and Nagao discloses a method or apparatus for controlling a parameter of at least one signal as discussed above. However, Cobo et al. and Nagao does not disclose the step of a receiving a desired command signal from at least one axis of joystick, or level and wherein the joystick includes a plurality of axes. Alexander et al. disclose a joystick controller having shaft (17 or lever 17), and the joystick includes a plurality of axes (see first axis, second axis and third axis, see paragraphs 0007-0011). It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of the joystick includes a plurality of axes as taught by Alexander into the apparatus or method for controlling a parameter of at least one signal of Cobo et

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al. and Nagao because this would be rotated about its own longitudinal axis to effect the third degree of control (see paragraph 0014).

3. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cobo et al. (US 6,305,162) and Nagao (US 6,532,003) as applied to claim 8 above, and further in view of Cobo et al. (US 5,737, 993 cited by Applicant).

Cobo et al. (162) and Nagao disclose every feature of the claimed invention, excluding the controller includes at least one of a deadband control and gain control. Cobo et al. (993) discloses the controller includes at least one of a deadband control and gain control (see col. 5, lines 64-67 and col. 6, lines 1-28). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the deadband control and gain control as taught by Cobo et al. (993) into the system of Cobo et al. (162) and Nagao because this would provide to maximally linearize the function of the hydraulic valves and provide the overall control system with a gain of incremental output.

Response To Arguments

4. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimnhung Nguyen whose telephone number (703) 308-0425.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **RICHARD A HJERPE** can be reached on (703) 305-4709.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D. C. 20231

Or faxed to:

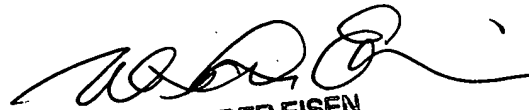
(703) 872-9314 (for Technology Center 2600 only).

Hand-delivery response should be brought to: Crystal Park II, 2121 Crystal Drive, Arlington, VA Sixth Floor (Receptionist).

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Kimnhung Nguyen
January 24, 2005



ALEXANDER EISEN
PRIMARY EXAMINER